

CLAIMS

1. A printer with embroidering function including a sewing machine body capable of sewing a workpiece cloth, a cloth holding frame holding the workpiece cloth to be sewn, a frame drive unit having the cloth holding frame connected therewith to move the cloth holding frame independently in two perpendicular directions on a horizontal plane, the printer with embroidering function having an ink-jet printer capable of printing the workpiece cloth of the cloth holding frame moved by the frame drive unit comprising:

a purging mechanism capable of purging a print head of the printing unit;

a carrier mechanism characterized by being capable of switching the purging mechanism or the print head between a purging position capable of purging the print head and a printable position spaced from the purging position and capable of printing by relatively moving the purging mechanism or the print head in a horizontal direction.

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2. The printer with embroidering function according to claim 1, characterized in that the carrier mechanism carries the purging mechanism in the horizontal direction.

25 3. The printer with embroidering function according to claim 1, characterized in that the carrier mechanism carries the print head in the horizontal direction.

4. The printer with embroidering function according to claims 1 or 2 or 3, characterized in that upon print operation, the purging mechanism and the print head are isolated from the workpiece cloth of the cloth holding frame connected to the frame drive unit.

5. The printer with embroidering function according to claim 4, characterized in that the purging mechanism and the print head being isolated from the workpiece cloth of the cloth holding frame are disposed outside a printable range of the workpiece cloth.

6. The printer with embroidering function according to claims 1 or 2 or 3 or 4 or 5, characterized in that the purging mechanism further comprises a nozzle wiper for the print head, wherein upon moving the purging mechanism or the print head from the purging position to the printable position, the print head is wiped by the nozzle wiper.

20 7. The printer with embroidering function according to claims 1 or 2 or 3 or 4 or 5 or 6, characterized in further comprising an ink receptacle capable of receiving flushed ink, wherein the carrier mechanism is capable of switching the purging mechanism or the print head to a flushing position allowing 25 reception of flushed ink by the ink receptacle.

8. The printer with embroidering function according to claims 1 or 2 or 3 or 4 or 5 or 6 or 7, characterized in further

comprising a head position switch mechanism that switches the print head between a printing position in close proximity of the workpiece cloth of the cloth holding frame connected to the frame drive unit and a nonprinting position upwardly spaced from the
5 printing position.

9. The printer with embroidering function according to claim 8, characterized in that the head position switch mechanism comprises head guide portions that guide the print head vertically movably and an electric motor that vertically drives
10 the print head.

10. The printer with embroidering function according to claim 8, characterized in that the head position switch mechanism comprises a head pivot portion that rotates the print head about a horizontal shaft and an electric motor that rotates the print head.
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11. The printer with embroidering function according to claims 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10, characterized
20 in that the printing unit is fixed in a rear side of at least either of a sewing machine body head, an arm or a foot.

12. The printer with embroidering function according to claim 11 characterized in that the sewing machine body and the printing unit are aligned in the horizontal direction, wherein a movement amount of the cloth holding frame by the frame drive unit is set based on a distance between a sewing needle of the
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sewing machine body and print head of the printing unit to obtain
a sewable and a printable area of a predetermined size within
the cloth holding frame connected to the frame drive unit.

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